1.0 PURPOSE OF AND NEED FOR ACTION

Chapter 1:

1.1 INTRODUCTION

The United States Environmental Protection Agency (USEPA), Region 9 proposes to designate an ocean dredged material disposal site (ODMDS) west of the Territory of Guam (Guam). The Guam location map is shown on Figure 1-1. It is USEPA's policy to publish and process a National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) for all ODMDS designations (39 *Federal Register* [FR] 37119, October 21, 1974), even if the action would not result in any potentially significant adverse impacts. This NEPA EIS discloses potential environmental impacts associated with disposal of dredged material at the alternative ODMDS locations.

By law, starting in 1997, ocean disposal may only occur at sites that have gone through a formal designation process to ensure that significant adverse impacts to the marine environment, and human uses of the ocean would not occur. This EIS is part of the formal process to identify and designate an environmentally acceptable ODMDS for Guam.

This document was prepared in accordance with the NEPA of 1969 (42 United States Code [USC] §4321 et seq.), as implemented by the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508); and USEPA Procedures for Implementing the Requirements of the Council on Environmental Quality on the NEPA (40 CFR Part 6), as amended October 19, 2007 (FR Vol. 72, No. 181, pp 53652-53672).

Dredging is the removal of sediment from the bottom of oceans, rivers, streams or lakes to facilitate safe navigation, flood control, building in-water structures, mining of material, and other activities. The "dredging and disposal process" is defined as the excavation, transport and placement of dredged material. Periodically, harbors and marinas may require maintenance dredging to remove material that: 1) has accreted since the previous dredging and 2) represents an impediment to navigation and or commercial viability of the operation. Construction dredging removes material in areas and/or to depths that have not been previously dredged.

Formal designation of an ODMDS in the FR does not constitute approval of dredged material for ocean disposal. Designation of an ODMDS provides one additional dredged material management option for consideration in the review of each proposed dredging project. Ocean disposal is only allowed when USEPA and United States Army Corps of Engineers (USACE) determine, on a case-by-case basis, that the dredged material: 1) is environmentally suitable according to testing criteria (40 CFR Parts 225 and 227), as determined from physical, chemical, and bioassay/ bioaccumulation testing that is briefly described in Section 2.7 (USEPA and USACE 1991), 2) does not have a viable beneficial reuse, and 3) there are no practical land placement options available. This EIS only addresses management options for suitable dredged material.

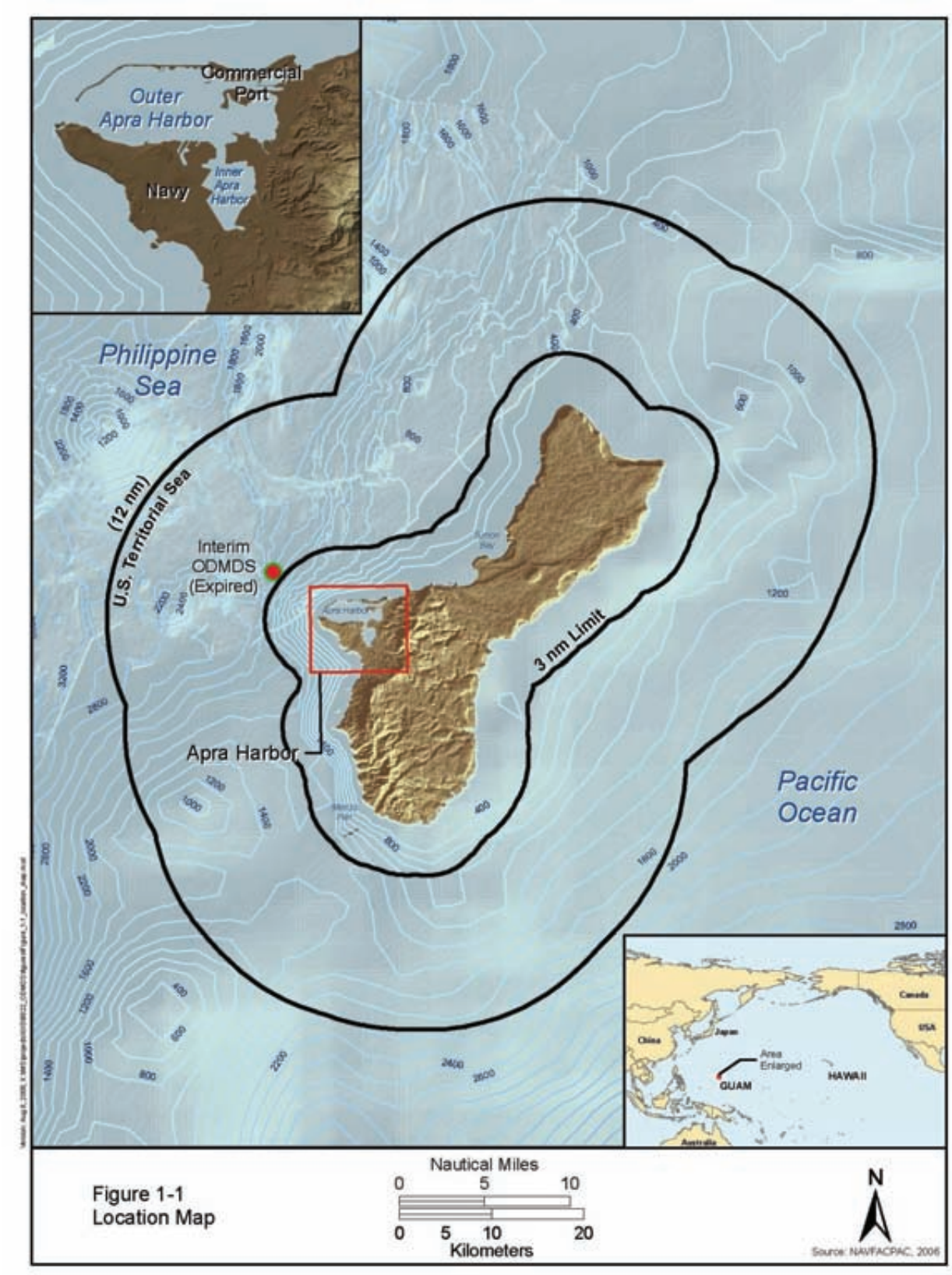

Figure 1-1
Location Map

1.2 PURPOSE FOR ACTION

The proposed action is the designation of an ODMDS near Guam. The purpose of the proposed action is to provide an additional option for the management of suitable material dredged from Guam and surrounding waters. Dredged material is defined as "suitable" when it meets the standard criteria (40 CFR Parts 225 and 227), as determined by physical, chemical, and bioassay/bioaccumulation testing (USEPA and USACE 1991). After an ODMDS is designated, other management options for suitable material, including beneficial use, will continue to be preferred over ocean disposal when such options are practicable and would not have unacceptable adverse effects. Figure 1-2 summarizes the management options for dredged material.

1.3 NEED FOR ACTION

An "interim" ODMDS was designated 3 nautical miles (nm) offshore of Apra Harbor (Figure 1-1) in 1977, but was never used. The designation was never finalized, and the interim site expired (along with all other "interim" disposal sites in the U.S. and Pacific Territories) on January 1, 1997. Since then, there has been an increased need for dredging in Guam, and the lack of a designated ODMDS has complicated dredged material management. Historically, dredged material generated around Guam by the Navy and the Port Authority of Guam (PAG) has either been stockpiled in upland dewatering sites or beneficially used. These continue to be the only management options for dredged material. Guam simply does not have enough options for managing dredged material.

The anticipated volume of dredged material generated around Guam over the next 30 years would exceed the capacity of known or existing stockpile or beneficial use options. The need for additional dredged material disposal options is exacerbated by the planned increase in military presence on Guam, which requires Navy and PAG harbor and navigation improvements. Assuming all existing upland dewatering facilities are used and all known beneficial use options are fully implemented, there would still be a substantial excess of dredged material to be managed. An ODMDS provides an important management option for dredged material that is suitable and non-toxic, but for which other management options are not practical.

1.3.1 Beneficial Reuse

Beneficial reuse is managing dredged material as a valuable resource as opposed to disposing of it as a waste (Figure 1-2). Some typical beneficial reuse options include beach replenishment, construction fill and landfill cover. Beneficial reuse is the preferred management option but it may not always be practical for individual projects for a variety of reasons, including:

- The physical or chemical characteristics of the dredged material may not meet the standards for the specific beneficial use alternative.
- The timing of the beneficial use project may not coincide with the availability of appropriate dredged material.

Potential dredged material beneficial reuse options on Guam are limited and may include:

- Construction material.
- Landfill cover.
- Fill for the planned PAG commercial port expansion.

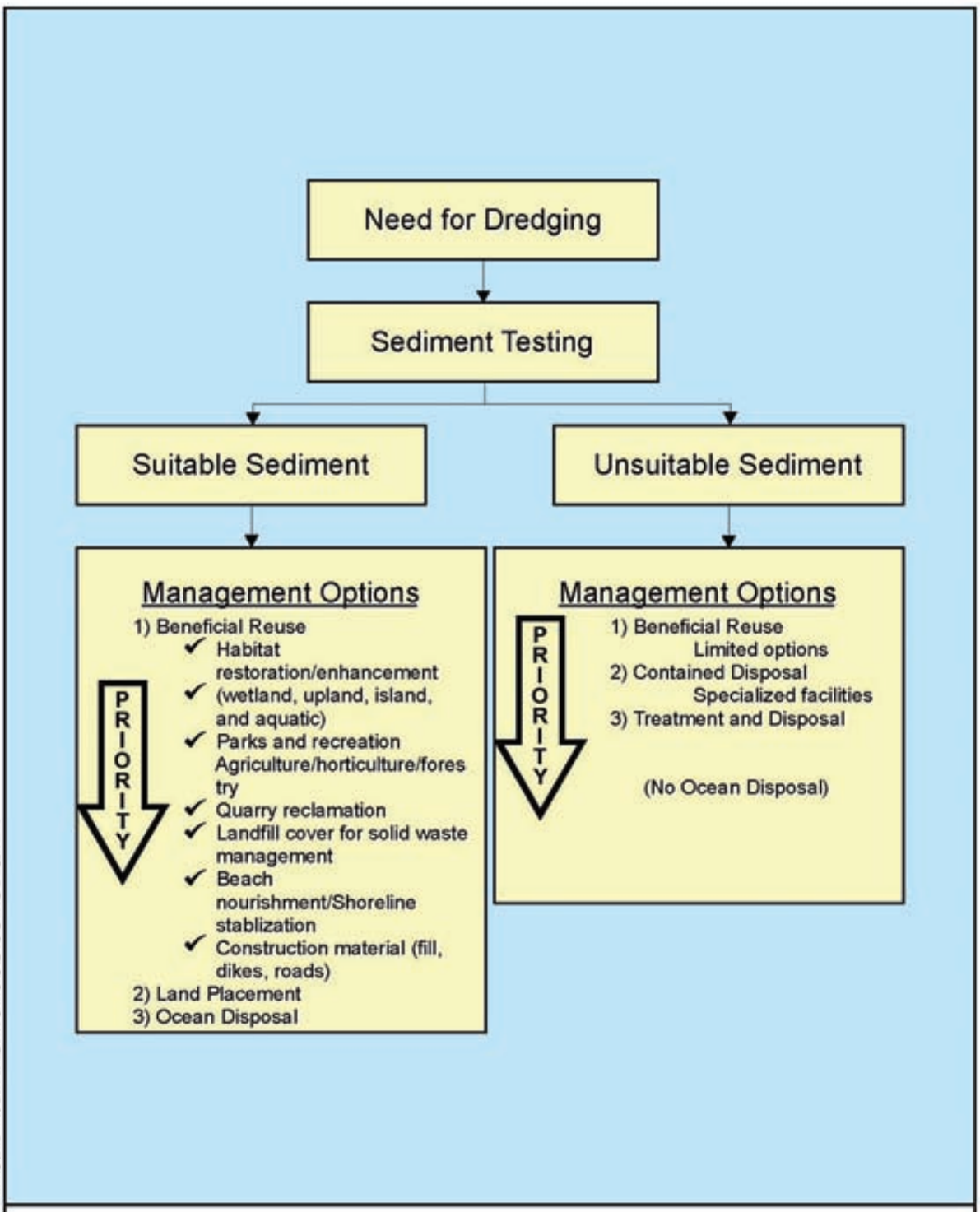

Figure 1-2
Dredged Material
Management Options

The estimated volume of dredged material that may have a beneficial use is 900,000 cubic yards (cy) as shown in Table 1-1.

Table 1-1. Summary of Excess Dredged Material

Activity	Approximate Volume (cy)
Dredged material generated (2010 and beyond[1])	4,500,000
Dredged material stockpiled (before 2010)	900,000
Subtotal Future Dredged Material Stockpiled	**5,400,000**
Identified beneficial uses	- 900,000
Total capacity of existing upland dewatering facilities	- 2,100,000
Future Excess Dredged Material to be Managed	**2,400,000**

[1] The Zone of Siting Feasibility Study (Weston Solutions and Belt Collins 2006) assumed a 30-year period for reasonably anticipated or likely projects identified in the Master Plan for Apra Harbor.

1.3.2 Dewatering Sites

It is often necessary to dry the dredged material before it can be either beneficially reused or disposed at an upland site (see Figure 1-2). In these cases a dewatering site is needed. Material is often temporarily stockpiled at a dewatering site until a location for placement can be determined. The existing dewatering sites on Guam are at or soon to be at maximum capacity. However, establishing new dewatering sites can be difficult for the following reasons:

- There may be insufficient capacity at the dewatering facilities for stockpiling material. Priority would be given to containment of material that is unsuitable for ocean disposal.
- New dewatering facilities can be time consuming to create, conflict with other land uses, and have their own environmental impacts.

The estimated capacity of existing dewatering facilities is 2,100,000 cy as shown in Table 1-1.

If a designated ODMDS were not available, additional dewatering facilities and/or beneficial use options would need to be developed to absorb this anticipated excess of 2,400,000 cy. The existing dewatering facility capacity (2,100,000 cy) would have to be doubled to absorb the anticipated excess dredged material volume (2,400,000 cy) [Table 1-1]. An ODMDS is an important option for the management of dredged material. Ocean disposal is primarily an option for materials as they are dredged. It is generally not a viable option for stockpiled dredged materials. There will always be the need for upland placement of some dredged material, but the ODMDS would result in less land area being used for dredged material dewatering and stockpiling.

1.4 NEPA PROCESS

1.4.1 Public Involvement

NEPA, CEQ and Coastal Zone Management Act (CZMA) regulations guide the public involvement process for designation of an ODMDS. Figure 1-3 illustrates the public participation process for the proposed action.

1.4.2 Notice of Intent (NOI) and Scoping Period

The first opportunity for public comment occurred during the scoping period.

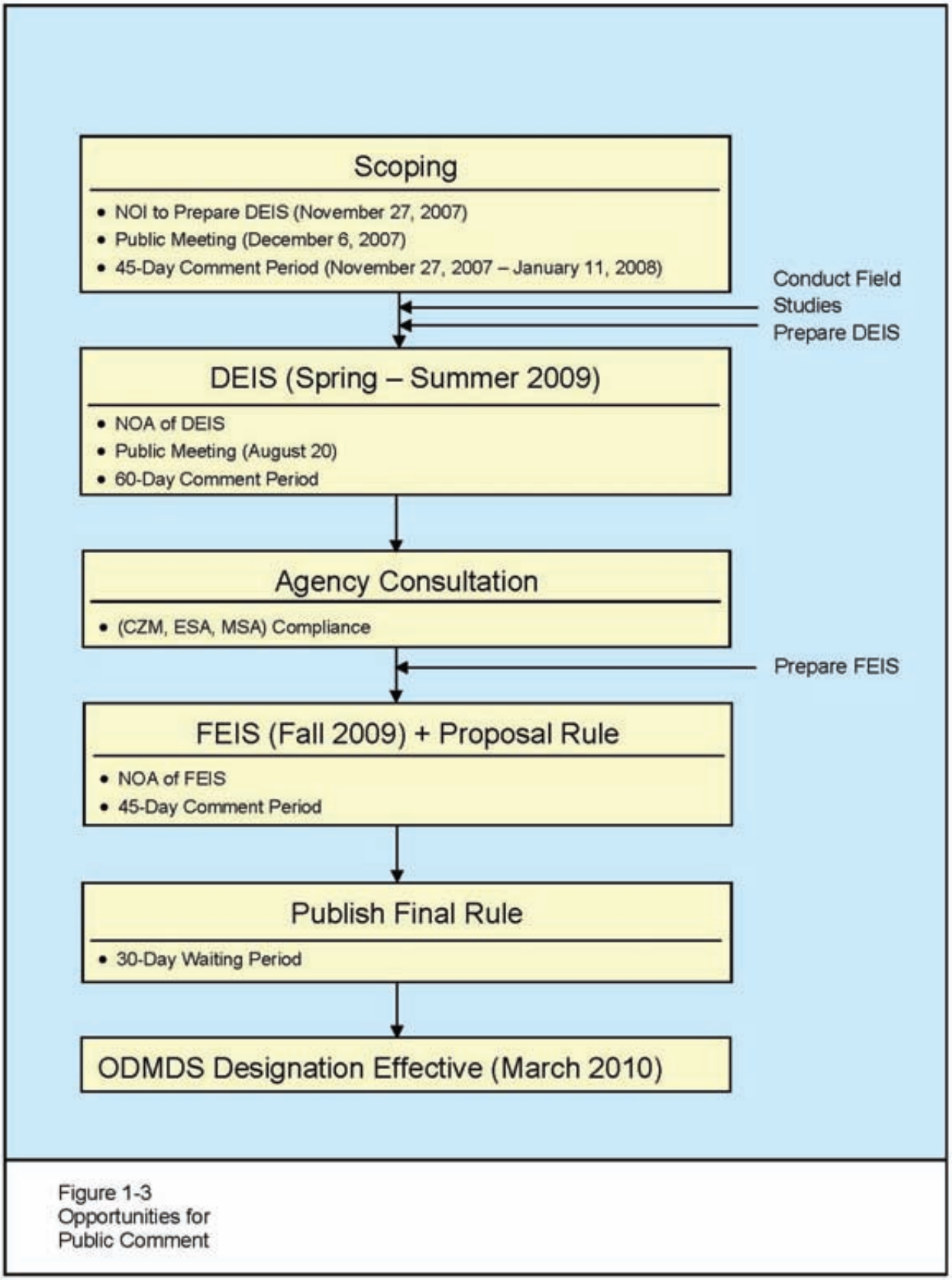

Figure 1-3
Opportunities for
Public Comment

1.4.2.1 Notice of Intent (NOI)

The NOI to prepare an EIS for the proposed action was published on November 27, 2007 (Appendix A). Copies of the NOI were also mailed directly to elected officials (Appendix A) including the Governor, U.S. Congressional Representative, Guam Legislators, and Guam Mayors on November 26, 2007. The NOI initiated the 45-day public scoping comment period that ended on January 11, 2008. During this period, the public was invited to communicate concerns, issues, and questions regarding the proposed action. Comments were provided by mail, email and orally at the scoping meeting.

1.4.2.2 Scoping Period

A scoping meeting announcement was published in the Pacific Daily News on November 27, 2007 (Appendix A). The scoping meeting was held at the Westin Hotel in Tumon between 6:00 pm and 8:00 pm. The format of the meeting was as follows:

- Attendees were asked to sign an attendance sheet and indicate if they wanted to be on the mailing list.
- USEPA made a presentation.
- USEPA responded to comments and questions from the audience.

The meeting was recorded and transcribed by a court reporting service. The transcript is provided in Appendix A. In addition, individual meetings were held with representatives of the following agencies/entities to describe the proposed action and solicit comments:

- U.S. Fish and Wildlife Services (USFWS), USEPA and National Oceanic and Atmospheric Administration (NOAA) – Honolulu .
- Port Authority of Guam.
- Navy Base Guam, Commanding Officer.
- Guam, Division of Aquatic and Wildlife Services (DAWR).
- Guam Environmental Protection Agency (GEPA).
- Bureau of Statistics and Plans (BSP).
- USACE, Guam Representative.
- Guam Environmental Partnering Forum.
- Guam Fisherman's Cooperative Association (GFCA).

The following issues were raised during the scoping period that ended on January 11, 2008, and are addressed in this EIS in the section noted in parenthesis:

- Describe the ODMDS designation process (Section 2.1).
- Why was Mariana Trench not considered? (Section 2.2.1).
- Explain the ODMDS operation, management, monitoring and enforcement procedures and responsibilities (Chapter 5).
- What is the impact of ODMDS on recreational uses, fishing, and navigation (Sections 3.3 and 4.3).
- What is the impact of ODMDS on marine benthic communities? (Sections 3.2 and 4.2).

- Have you considered natural hazards: seismicity, typhoons, and high seas in the siting and management of the ODMDS? (Sections 3.1, 4.1, Chapter 5).
- Is there potential for barge-tug accidents with other vessels or other navigational safety issues? (Sections 3.3, 4.3, Chapter 5).
- Who decides whether to dewater dredged material for beneficial use or dispose of material in the ODMDS? (Chapter 5).

Some comments raised during scoping were determined to be outside the scope of the proposed action. These issues are not directly addressed in this EIS:

- Evaluation of future projects' dredged material suitability for ODMDS disposal. This will be assessed during each project's USACE permitting process. Only dredged material meeting USEPA suitability guidelines, may be considered for ocean disposal.
- Evaluation of future dredging projects' impacts at the specific dredging site. This will be assessed during each project's USACE permitting process.
- Development of a Strategic Plan for beneficial use of dredged material on Guam. USEPA encourages the Government of Guam (GOVGUAM) to develop a Strategic Plan that includes an ODMDS as an additional management option.
- Impacts of establishing new navigation routes. This EIS describes the proposed routes between Apra Harbor and the ODMDS alternatives, but does not propose or evaluate establishing new shipping routes. Existing shipping lanes will be used to transport dredged material to any ODMDS. Barges of dredged material are subject to the same navigation rules and regulations that govern all other ship traffic including requirements for a notice to mariners, and respecting rights-of-way.

1.4.3 DEIS Status Meeting

During the week of May 18 project update meetings were held, in Hawaii and Guam, with representatives from multiple agencies and organizations including the USFWS, NOAA/National Marine Fisheries Services (NMFS), GEPA, Guam BSP, Guam Department of Agriculture, Guam Waterworks Authority (GWA), Navy Base Guam, Commanding Officer, PAG, and GFCA. The briefings focused on updating the audience with field research findings.

The following issues were raised during the project update meetings, and are addressed in this EIS in the section noted in parenthesis:

- ODMDS designation process (Section 2.1).
- Interim ODMDS designation (Section 2.3).
- ODMDS operation, management, monitoring and enforcement procedures and responsibilities (Chapter 5).
- Water currents in the vicinity of the ODMDS (Sections 3.1 and 4.1).
- Impact of ODMDS on recreational uses, fishing, and navigation (Sections 3.3 and 4.3).
- Fate of dredged material (Sections 2.4, 2.5, 5.2).
- Impact of ODMDS on marine pelagic and benthic communities (Sections 3.2 and 4.2).
- Effect of natural hazards, including typhoons, and high seas, effect on management of the ODMDS (Sections 3.1, 4.1, Chapter 5).

1.4.4 Draft EIS (DEIS) / Coastal Zone Management (CZM) Consistency Review

The CZM consistency review by the BSP is being conducted concurrently with DEIS review. The BSP correspondence will be included in the Final EIS (FEIS).

The DEIS addresses the relevant comments received during the scoping period. A Notice of Availability (NOA) of the DEIS will be published in the FR on [to be determined], which will initiate a 60-day public comment period. The standard public comment period is 45-days; however, at the request of the regulatory agencies the public comment period has been extended. Copies of the DEIS will be mailed directly to interested parties, made available to the public through the USEPA project website (www.epa.gov/region09/water/dredging/index.html), and at RFK Memorial Library at the University of Guam and the Nieves M. Flores Memorial Library. The DEIS distribution list is included in Appendix A.

Public hearing announcements will be published in the Pacific Daily News on [to be determined]. The public hearing will be held at the Westin Hotel in Tumon on August 20, 2009. The format of the meeting was as described for the scoping meeting. Appendix A will include a transcript of the public hearing, copies of all written comments and USEPA responses, and the transcript of the public meeting.

1.4.5 Final EIS (FEIS) / Proposed Rule

The FEIS and Proposed Rule for the designation of the ODMDS will be prepared following review of and response to public comments on this DEIS. The FEIS will address relevant comments received on the DEIS. Copies of the FEIS/Proposed Rule will be sent to all parties who offered comments on the DEIS, all recipients of the DEIS, and those who requested a copy. A NOA of the FEIS/Proposed Rule will be published in the FR and Pacific Daily News after which another 45-day comment period will begin.

1.4.6 Final Rule / Site Designation

The Final Rule will be published in the FR and will include responses to any comments on the Proposed Rule. The Guam ODMDS designation will then take effect 30 days later. From that time project proponents can apply for a USACE permit to use the site.

1.5 SCOPE OF THE EIS

This EIS evaluates impacts associated with dredged material disposal at either of the ODMDS alternatives. It does not address project specific dredging actions. The following are excluded from the scope of the EIS:

- potential impacts of designating and using specific new upland dewatering sites;
- potential impacts of specific beneficial uses;
- suitability of any particular dredged material for specific beneficial uses;
- impacts of dredging methods or actions on the environment and coastal zone;
- purpose and need for future dredging projects and locations; and
- management of dredged materials deemed unacceptable for ocean disposal.

These would be addressed under project-specific permit applications and conditions, NEPA documentation, or CZM consistency determination.

1.6 COOPERATING AGENCIES AND AGENCY CONSULTATION

The USACE was invited to be a cooperating agency and accepted on March 4, 2009. In addition, the USFWS and NOAA/NMFS were consulted prior to release of the DEIS. Correspondence is included in Appendix A.

1.7 REGULATORY FRAMEWORK

There are numerous federal laws and regulations that guide or restrict the disposal of dredged material into the waters of the U.S. and its territories. These laws are designed to protect the environment, coastal resources and commerce. In addition, several Acts have been adopted to protect archaeological and historical resources. The relevant laws and regulations are summarized in Table 1-2.

Table 1-2. Summary of Compliance with the Key Laws, Regulations and Executive Orders

Statute	Compliance	Status of Compliance
London Convention (26 U.S. Treaties and other International Agreements (UST) 2403: Treaties and Other International Acts Series (TIAS) 8165)	Full	Implemented through the Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972
MPRSA of 1972, as amended (33 U.S.C. 1401 et seq.)	Full	In compliance with Section 103 of the MPRSA, a Site Management and Monitoring Plan (SMMP) was developed in support of the proposed ODMDS final designation. USACE will issue ocean disposal permits for future dredged material through regulations promulgated under Section 103 of the MPRSA. USEPA is responsible for MPRSA compliance of all ocean disposal activities.
NEPA of 1969 (42 U.S.C. 4341 et seq.)	Full	This EIS was prepared for public review pursuant to NEPA with the USEPA as the lead agency and USACE as cooperating agency.
Clean Water Act (CWA) of 1972 (33 U.S.C. 1251 et seq.)	N/A	All barges of dredged material will pass through CWA jurisdiction; however, the alternative ODMDSs are outside the jurisdiction of CWA (3 nm).
Section 10, Rivers and Harbors Act	N/A	The dredging activity that generates material for the ODMDS requires compliance with this Act; however, the designation of an ODMDS would not require a Section 10 approval.
Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA) (16 U.S.C. 1801 et seq.)	Full	Formal consultation with the National Marine Fisheries Service (NMFS) was initiated on January 9, 2009 (see Chapter 5 of this DEIS). The EIS concludes that the proposed action will not result in any significant adverse impacts to any species addressed in the "Mariana Archipelago Fishery Ecosystem Plan."

Statute	Compliance	Status of Compliance
Clean Air Act (CAA), as amended (42 U.S.C. 1451 et seq.)	Full	The air emissions at the site would be from the vessels delivering dredged material to the ODMDS and would be short-term.
Coastal Zone Management Act of 1972 (16 U.S.C. 1456 et seq.)	Full	Although the ODMDS would be outside of Guam's coastal zone, transport to this site will be through the coastal zone, therefore USEPA has drafted a coastal zone consistency determination for review and concurrence by the Guam Coastal Zone Management Office, within the BSP.
Fish and Wildlife Coordination Act of 1958 (16 U.S.C. 661 et seq.)	Full	Formal consultation with the USFWS and the NMFS was initiated on January 9, 2009. The EIS concludes that the proposed action would not adversely impact fish or wildlife.
Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 et seq.)	Full	Formal consultation with the USFWS and NMFS was initiated on January 9, 2009. The EIS concludes that the proposed action would not adversely impact endangered species.
National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. 470 et seq.)	Full	Per 36 CFR 800.3(a) (1) the proposed action is not anticipated to cause effects on historic resources.
Executive Order (EO) 11593, Protection and Enhancement of the Cultural Environment (36 FR 8921, May 15, 1971)	Full	Full Per 36 CFR 800.3(a) (1) the proposed action is not anticipated to cause effects on cultural environment.
EO 12372, Intergovernmental Review of Federal Programs (47 FR 30959, July 16, 1982)	Full	For this EIS, the USEPA is consulting and coordinating with GOVGUAM and federal resources agencies regarding the proposed action.
EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations	Full	No minority and/or low income communities will be disproportionately exposed to environmental harms and risks, and the proposed action does not affect the level of protection provided to human health or the environment.
EO 13089, Protection of Coral Reefs	Full	The ODMDS alternatives are in water too deep to support coral reefs. However, dredging projects will have to comply with EO 13089 and the SMMP will address compliance to safeguard from transport impacts.
Presidential Proclamation under the authority of the Antiquities Act (16 U.S.C. 431), Designation of Mariana Trench Marine National Monument	Full	Neither the ODMDS alternatives nor the transport route to the ODMDS alternatives lay within the designated monument areas: the Trench Unit, Islands Unit, or Volcanic Unit.

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